

Mark B. Taylor, M.D. is a world-renowned dermatologist and cosmetic laser surgeon who has been in practice for over thirty years. He has been a leader in the field of cosmetic laser surgery, pioneering and teaching many new laser techniques to over 4,000 doctors world-wide. He received his medical degree from the University of Utah and is board-certified in dermatology through the American Board of Dermatology. He is a member of the American Society for Laser Medicine and Surgery as well as many other professional organizations.



#### Clinical Bulletin

J. LAHA, Vol. 2013, No. 2; p. B03.

## PIANO Mode Nd:YAG Laser Skin Tightening

Mark B. Taylor, MD

### Parameters:

Laser source:	Nd:YAG, 1064 nm
Pulse duration:	PIANO
Fluence:	110 J/cm <sup>2</sup>
Handpiece:	R-34
Spot size:	20 mm

### Treatment procedure:

Nd:YAG is the deepest penetrating wavelength, and when it is applied using PIANO mode, skin-specific heat diffusion processes allow the deeper layers of thick dermal tissue to quickly heat to the desired temperatures, while sparing the epidermis from overheating. This case presents an ideal patient for this skin tightening treatment, in her mid 40's with mild-to-moderate laxity in the cheeks and upper neck and manifesting an early appearance of jowls.

The skin-tightening treatment was performed using the SP Dynamis laser (1064 nm wavelength) in PIANO mode, with a 4.4 second pulse, 20 mm spot size, and fluence of 110 J/cm<sup>2</sup>, continuously monitoring the temperature with an infrared thermometer. The laser was applied in a zigzag pattern, first vertically and then horizontally over the cheek, the upper neck and then the lower neck on one side, and then the same treatment on the other side. It can be performed without anesthesia, but typically patients are given a topical cream of 7% lidocaine and 7% prilocaine. Once the cream has been on the skin for 30 minutes, it is wiped off and the treatment begins.

While some improvement can be seen after a single treatment, I recommend most patients receive three to five treatments, spaced one month apart, with maintenance treatments performed one to two times per year.



Published by the Laser and Health Academy. All rights reserved. © 2013

Disclaimer: The intent of this Laser and Health Academy publication is to facilitate an exchange of information on the views, research results, and clinical experiences within the medical laser community. The contents of this publication are the sole responsibility of the authors and may not in any circumstances be regarded as official product information by the medical equipment manufacturers. When in doubt please check with the manufacturers whether a specific product or application has been approved or cleared to be marketed and sold in your country.



Before treatment



Immediately after second treatment